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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,245	05/24/2000	Shin Muto	35.C14506	4825

5514 7590 01/15/2004

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EXAMINER	
HAMILTON, MONPLAISIR G	

ART UNIT	PAPER NUMBER
2172	15

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary	Application No.	Applicant(s)	
	09/576,245	MUTO ET AL.	
	Examiner	Art Unit	
	Monplaisir G Hamilton	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

P riod f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7, 9-15, 17-23, 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-7,9-15,17-23 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The communication filed on 10/27/03 amended Claims 1, 6, 9, 14, 17, 22, 26, and 27. Claims 1-7, 9-15, 17-23 and 25-27 remain for examination.

Response to Arguments

2. Applicant's arguments filed 10/27/03 have been fully considered but they are not persuasive.

Applicant argues: "The Office Action states that Claims 1, 6, 9, 14, 17, 22, 26, and 27 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse the rejections, and submit that the search loop in Fig. 5 (steps 5501 and S503-S508) sufficiently discloses more than one search step. (See the corresponding discussion of Fig. 5 at page 11, line 24, to page 13, line 10, of the specification.) More specifically, according to the present invention, after a plurality of search conditions are inputted, searches are executed in response to a search request. First, one of the search conditions (the first search condition) is retrieved and executed in step S503 (the first search means). If a device is found that matches the first search condition (YES in step S506), the process returns to step S501. Then, another search condition (the second search condition) is retrieved and executed in step S503 (the second search means). Accordingly, Applicants submit that Claims 1, 6, 9, 14, 17, 22, 26, and 27 are supported by an adequate written description, and respectfully request withdrawal of the rejections under 35 U. S. C. § 112, first paragraph."

Examiner notes applicant's explanation. However, a loop does not constitute two means/computers/processes. A loop is a set of statements in a program executed repeatedly,

either a fixed number of times or until some condition is true or false (*Microsoft Press Computer Dictionary*, page 290). A loop is not a set of "means" instead it is a single means. Furthermore, a loop does not operate on a first and second computer. Examiner maintains that the written description does not support the claimed first and second means/computer. Fig 5. represents a single process that is executed using the search conditions. The process has multiple steps/acts, however these steps/acts do not correspond to a first and second means/computer.

Applicant further argues: "Nothing in Suzuki is believed to teach or suggest a device searching apparatus that searches for at least one device on a network, wherein the apparatus includes "first search means for searching for at least one device that satisfies the first search condition entered by said input means," and "second search means for searching for at least one device that satisfies the second search condition entered said input means," and "search control means for controlling said first search means and said second search means to execute searches in response to input of a search request," and "output means for outputting a search result based on the searches by said first search means and said second search means," wherein "said output means outputs the search result such that a device that satisfies the first search condition may be discriminated from a device that satisfies the second search condition," as recited in Claim 1."

Examiner disagrees. Suzuki discloses a device list window showing selection candidates is displayed by selection candidate update processing to find new devices and displaying candidates meeting setting condition to display candidates meeting the setting condition (col 19, lines 25-30). Suzuki further discloses a search is performed on the devices based on a set of respective search conditions, and search results are arranged in accordance with a set priority

order (col 20, lines 60-64). Suzuki discloses an example, Fig. 26, of a window where selection candidates, detected by search on condition "setting 1" are displayed in accordance with displaying setting 1. In this example, the search condition is "printer connected or once-connected" (col 21, lines 1-10). This search condition contains two criteria connected with a logical operator "or", which essentially merges results that match printer connected with results that match once-connected. Additionally, Suzuki discloses that a darkened window box indicates the results that match the once-connected criteria (col 21, lines 15-20). Suzuki's system essentially takes two search conditions, returns devices that match the conditions, and discriminates the devices that match the first condition from devices that match the second condition. Therefore, examiner holds that Suzuki's disclosure anticipates the claimed invention.

Applicant further argues: "As understood by Applicants, the Owa et al. system searches for a single, optimum printer based on a user's preferences. Therefore, Applicants respectfully submit that Owa et al. *teaches away* from executing multiple (first and second) searches for devices that satisfy multiple (first and second) search conditions, respectively, and then outputting a result of the searches in a manner that allows a device that satisfies the first search condition to be discriminated from a device that satisfies the second search condition, as claimed in Claim 1."

Examiner disagrees with applicant. Owa (Fig. 6) discloses a search process that selects an optimum printer based on multiple attributes (col 5, lines 1-45). Owa further discloses that each page of a document is analyzed along with user information to determine which printers to use for each page. Each page can have a different printer (col 12, lines 25-65). Thereby discriminating the printers according to the pages that they can reproduce. As noted in the prior action Owa does not explicitly disclose the claimed "outputting a result of the searches in a

manner that allows a device that satisfies the first search condition to be discriminated from a device that satisfies the second search condition".

McCormack however explicitly discloses discriminating the devices based on the filters that they match (Fig 3, col 16, line 60-col 17, line 15).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Owa such that the user would be able to determine which attributes a printer matches. One of ordinary skill in the art would have been motivated to do this because it would provide easy selection of an optimum printer if the user disagrees with the printer selected by the system.

Applicant further argues: "Applicants respectfully submit that Owa et al. may not properly be combined with McCormack et al., for at least the reason that Owa et al. focuses on selecting a *single,* optimum device (printer) from a plurality of devices (printers), while McCormack et al. focuses on selecting a *group* of devices and obtaining information on that a group. Therefore, the teachings of Owa et al. and McCormack et al. would, if combined, present a conflict to one of ordinary skill in the relevant art as to whether the hypothetical combined system would select a single device or a group of devices."

Examiner disagrees with applicant. The group of devices that match a filter may contain only one device. A group signifies a distinction and does not necessarily specify that there is necessarily more that one device in the group. Therefore examiner holds that the combination of these two references is within the scope of an ordinary artisan.

Applicant further argues: "Further, Shima specifically states that if "no printer is specified as a destination, a suitable printer is selected from printers remaining in a standby condition (e.g., a printer is

selected from printers remaining in a standby condition in order of precedence of identification number. Alternatively, a printer is selected *in decreasing order* of frequency of accumulated use)." (Emphasis added. See column 15, lines 49-54.) Therefore, instead of teaching that a printer is selected *in order* of frequency of use, in which a printer with a high frequency of use is selected before a printer with a low frequency of use, Shima states that a printer is selected *in decreasing order,* which is understood to mean that a printer with a low frequency of use is selected before a printer with a high frequency of use. Therefore, Shima teaches away from the feature of Claim 6 wherein, "in a case in which a number of devices having the first group of attributes is zero, said control means adds to the search result information of the device with the high frequency of use . . ."

Examiner disagrees with applicant's interpretation of a printer is selected *in decreasing order* of frequency of accumulated use. Decreasing order means that you start from a highest and move to a lowest. In other words the system first selects a printer with the highest use and determines if it is able to complete the job otherwise the seconds highest and so on is selected. Examiner maintains the claimed invention is unpatentable.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 6, 9, 14, 17, 22, 26 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. These claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant has successfully invoked 112 ¶ 6, unfortunately the original disclosure does not support the claimed second search means, second search step, and second search computer. The original disclosure as filed describes only one search process/means/computer/step that processes plural search conditions (Specification: page 11-13; Fig 5). It is unclear which section of the original disclosure describes the claimed second search process/means/computer/step. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 9, 17 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6477589 issued to Suzuki et al, herein referred to as Suzuki.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Referring to Claims 1, 9, 17 and 26:

Suzuki discloses a device searching apparatus that searches for at least one device on a network, comprising:

input means for entering a first search condition and a second search condition, both related to a device function, in order to search for a desired device on the network (Fig 26; col 19, lines 25-30); first search means for searching for at least one device that satisfies the first

search condition entered by said input means; second search means for searching for at least one device that satisfies the second search condition entered by said input means (Fig 29; col 20, lines 58-65); search control means for controlling said first search means and said second search means to execute searches in response to input of a search request (col 19, lines 25-40; col 20, line 60-col 21, line20); and output means for outputting a search result based on the searches by said first search means and said second search means, wherein said output means outputs the search result such that a device that satisfies the first search condition may be discriminated from a device that satisfies the second search condition (col 20, lines 60-65; Fig 42; col 55-65;).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 9, 17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6342971 issued to Owa et al, herein referred to as Owa in view of US 6295527 issued to McCormack et al, herein referred to as McCormack.

Referring to Claims 1, 9, 17 and 26:

Owa discloses a device searching apparatus that searches for at least one device on a network, comprising: input means for entering a first search condition and a second search condition, both related to a device function, in order to search for a desired device on the network (col 4, lines 25-35; col 4, line 65-col 5, line 25); first search means for searching for at least one device that satisfies the first search condition entered by said input means (col 5, lines 45-55); second search means for searching for at least one device that satisfies the second search condition entered by said input means (col 6, lines 5-20); search control means to execute searches in response to input of a search request (Fig 6, col 4, line 65-col 5, line 30).

Owa does not explicitly disclose an "output means for outputting a search result based on the searches by said first search means and said second search means, wherein said output means outputs the search result such that a device that satisfies the first search condition may be discriminated from a device that satisfies the second search condition."

McCormack discloses output means for outputting a search result based on the searches by said first search means and said second search means, wherein said output means outputs the search result such that a device that satisfies the first search condition may be discriminated from a device that satisfies the second search condition (Fig 3; Fig 5; col 16, line 60- col 17, line 15).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teaching of Owa to output the results of the search. One of ordinary skill in the art would have been motivated to do this because it would allow the user to select the best device.

Referring to Claims 2, 10 and 18:

Owa in view of McCormack disclose the limitations as discussed in Claims 1, 9 and 17 above. McCormack further discloses first search means performs a first search based on an inputted value representing a plurality of functions, said second search means performs a second search based on an inputted value representing a plurality of functions, the inputted value being inputted independently of the inputted value used by said first search means (col 13, lines 45- col 14, line 62), and said output means distinguishably displays a search result of said first search means and a search result of said second search means on a display unit (Fig 3; Fig 5; col 16, line 60- col 17, line 15).

Referring to Claim 3:

Owa in view of McCormack disclose the limitations as discussed in Claim 2 above. McCormack further discloses communication means for acquiring device information, registered

corresponding to identification information in another apparatus on the network, from the other apparatus (col 16, line 60- col 17, line 15), wherein said control means controls said communication means to acquire additional information on each device identified in the search result, and causes the additional information to be added to the search result (Fig 3; Fig 5; col 16, line 60- col 17, line 15).

Referring to Claims 4, 12 and 20:

Owa in view of McCormack disclose the limitations as discussed in Claims 3, 11 and 19 above. McCormack further discloses said control step includes acquiring, from an apparatus that manages location information of devices on the network, location information of each device identified in the search result, and adding the location information to the search result (col 10, lines 60-65).

Referring to Claims 11 and 19:

Owa in view of McCormack disclose the limitations as discussed in Claims 10 and 18 above. McCormack further discloses a control step of controlling said output step to output the search result such that the search result includes identification information and attribute information of a device that satisfies at least one of the first search condition and the second search condition (Fig 3; Fig 5; col 16, line 60- col 17, line 15); and a reception step of receiving device information, registered corresponding to identification information in another apparatus on the network, from the other apparatus, wherein said control step controls said reception step

to acquire additional information on each device identified in the search result, and cause the addition information to be added to the search result (col 16, line 60- col 17, line 15).

6. Claims 5, 13 and 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iizuka and Gregerson as applied to Claims 1-4, 9-12, 17-20 and 26above, and further in view of Network Design Manual *The Future of Enterprise Printing*, herein referred to as Enterprise Network Printing.

Referring to Claim 5, 13 and 21:

Owa in view of McCormack disclose the limitations as discussed in Claims 3, 11 and 19 above.

Owa in view of McCormack do no explicitly disclose the claimed "acquiring from an apparatus that manages charge information of devices on the network, charge information of each device identified in the search result, and to add the charge information to the search result".

Enterprise Network Printing discloses that a user can be billed for usage of the printer (page 1, lines 13-18).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Owa in view of McCormack to provide a billing mechanism. One of ordinary skill in the art would have been motivated to do this because it would allow users to determine the cost information of a printer before printing to it (page 1, lines 13-15).

7. Claims 6-7, 14-15, 22-23 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6342971 issued to Owa et al, herein referred to as Owa in view of US 6369909 issued to Shima, herein referred to as Shima.

Referring to Claims 6, 14, 22 and 27:

Owa discloses a device searching apparatus that searches for at least one device on a network, comprising: management means for managing a database that includes identification information for identifying a device on the network and static information associated therewith (col 8, lines 14-25); input means for entering a first group of attributes and a second group of attributes, both related to a device function, for searching for at least one desired device on the network (col 4, lines 25-35; col 4, line 65-col 5, line 25); first search means for searching for at least one device from the database having the first group of attributes entered by said input means (col 5, lines 45-55); second search means for searching for at least one device that satisfies the second search condition entered by said input means (col 6, lines 5-20); output means for outputting a search result that includes identification information and static information of a device having at least one of the first and second groups of attributes (col 6, line 65- col 7, line 10); control means for adding dynamic information to the search result, according to a number of devices having at least one of the first and second groups of attributes; and discrimination means for discriminating a device with a high frequency of use, based on dynamic information, which relates to a use history of devices on the network (col 7, lines 1-10).

Owa does not explicitly disclose "wherein, in a case which a number of devices having first group attributes is zero, said control means adds to the search result information of the device with the high frequency of use discriminated using said discrimination means."

Shima discloses wherein, in a case which a number of devices having first group attributes is zero, said control means adds to the search result information of the device with the high frequency of use discriminated using said discrimination means (col 15, lines 49-55).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Iizuka to provide a mechanism for setting a default device as the device whose frequency of use is the most. One of ordinary skill in the art would have been motivated to do this because it would provide the user with a device that would be the most suitable to complete the print job (col 15, lines 48-51).

Referring to Claims 7, 15 and 23:

Owa in view of Shima disclose the limitations as discussed in Claim 6 above. Owa further discloses a case in which the number of devices identified in the search result is at least equal to a predetermined value, said control means acquires dynamic information from a device having at least one of the first and the second groups of attributes and adds the dynamic information to the search result (col 7, lines 1-10).

Referring to Claim 25:

Owa in view of Shima disclose the limitations as discussed in Claim 6 above. Owa further discloses first group of attributes used by said first search means includes at least one of color, double side and staple (col 5, lines 1-10); said output means outputs to a display unit (col 12, 35-40), and said first search means and said second search means search for devices having the first group of attributes and the second group of attributes, respectively, in accordance with a search instruction inputted by a user, such that found devices are automatically displayed on the display unit as list (col 12, lines 35-45; col 14, lines 45-50).

Final Rejection

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is 1703-305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on 1703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1703-305-3900.

Monplaisir Hamilton

